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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,799	07/25/2006	Hiroshi Maegawa	R2184.0475/P475	7558

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EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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04/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,799	Applicant(s) MAEGAWA, HIROSHI	
	Examiner Peter Agustin	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-96 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This application is a national stage entry (371) of PCT/JP04/03420, filed on March 15, 2004.
2. Claims 1-96 are currently pending.

Election/Restrictions

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-20, drawn to an information recording medium comprising: a plurality of information recordable recording layers, wherein a spiral or concentric tracks are formed on each of the plurality of recording layers, and at least a portion of each track has wobbles corresponding to a wobble signal that includes layer information for discriminating a recording layer on which the track is formed.

Group II, claims 21-25 & 32, drawn to a recording medium comprising a plurality of recording layers, wherein a track on each of the recording layers has wobbles formed by a carrier wave part for causing detection of a carrier wave having a constant frequency and a layer information part for causing detection of a frequency modulated wave indicating a place or position of the recording layer.

Group III, claims 26-31, drawn to a recording medium comprising a plurality of recording layers, wherein a track on each of the recording layers has wobbles formed by a carrier wave part for causing detection of a carrier wave having a constant frequency and a layer information part for causing detection of a phase modulated wave indicating a place or position of the recording layer.

Group IV, claims 33-68, drawn to an optical disk comprising a track having wobbles, wherein the wobbles form an FSK modulation part based on a waveform of first information subjected to an FSK modulation, a PSK modulation part based on a waveform of second information subjected to a PSK modulation, and a carrier wave part based on a constant frequency waveform, that are separate.

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Group V, claims 69-86, drawn to an information recording medium forming apparatus for forming a track having wobbles on an information recording medium by irradiating thereon a light spot, comprising: a recording apparatus irradiating the light spot on the information recording medium; an irradiating position changing unit generating the wobbles of the track by changing an irradiating position of the light spot on the information recording medium; a signal generator generating a plurality of signals having different frequencies or having the same frequency but inverted phases; and a selection unit selectively outputting the plurality of generated signals based on a predetermined signal, wherein the irradiating position changing unit generates the wobbles based on the signals that are selectively output from the selection unit.

Group VI, claims 87-93, drawn to an information detecting apparatus for reading, from an information recording medium having a track formed with wobbles of modulated information, information recorded in the wobbles, comprising: a clock generating part configured to generate a reference clock from a wobble signal that is obtained from the wobbles; a demodulating part configured to detect FSK modulated information, PSK modulated information or FSK+PSK modulated information from the wobble signal based on the reference clock signal; a synchronization detection part configured to output a timing signal that indicates a position of layer information indicating a place or position of each recording layer when the information recording medium has a plurality of data recordable recording layers; and a layer information detection part configured to detect the layer information by holding an output of the demodulating part in response to the timing signal.

Group VII, claims 94-96, drawn to an information recording medium having a plurality of recording layers recordable with data by irradiating light thereon, and a track on each recording layer includes wobbles of modulated information, wherein: the wobbles are recorded with FSK modulated information, PSK modulated information or FSK+PSK modulated information as layer information indicating a place or position of each recording layer.

4. The inventions listed as Groups I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features, i.e., each group has the following special technical features not found in the other groups:

Group	Special Technical Feature
I	wherein a spiral or concentric tracks are formed on each of the plurality of recording layers, and at least a portion of each track has wobbles corresponding to a wobble signal that includes layer information for discriminating a recording layer on which the track is formed
II	wherein a track on each of the recording layers has wobbles formed by a carrier wave part for causing detection of a carrier wave having a constant frequency and a layer information part for causing detection of a frequency

	modulated wave indicating a place or position of the recording layer
III	wherein a track on each of the recording layers has wobbles formed by a carrier wave part for causing detection of a carrier wave having a constant frequency and a layer information part for causing detection of a phase modulated wave indicating a place or position of the recording layer
IV	wherein the wobbles form an FSK modulation part based on a waveform of first information subjected to an FSK modulation, a PSK modulation part based on a waveform of second information subjected to a PSK modulation, and a carrier wave part based on a constant frequency waveform, that are separate
V	a signal generator generating a plurality of signals having different frequencies or having the same frequency but inverted phases; and a selection unit selectively outputting the plurality of generated signals based on a predetermined signal, wherein the irradiating position changing unit generates the wobbles based on the signals that are selectively output from the selection unit
VI	a demodulating part configured to detect FSK modulated information, PSK modulated information or FSK+PSK modulated information from the wobble signal based on the reference clock signal; a synchronization detection part configured to output a timing signal that indicates a position of layer information indicating a place or position of each recording layer when the information recording medium has a plurality of data recordable recording layers; and a layer information detection part configured to detect the layer information by holding an output of the demodulating part in response to the timing signal
VII	wherein: the wobbles are recorded with FSK modulated information, PSK modulated information or FSK+PSK modulated information as layer information indicating a place or position of each recording layer

5. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/
Primary Examiner, Art Unit 2627